



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/033,399

DATE: 01/18/2002

TIME: 08:04:15

Input Set : A:\13403.0005NPUS00.ST25.txt

Output Set: N:\CRF3\01182002\J033399.raw

PP-5-4

Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Wang, Caili
 4 Zhong, Pingyu
 5 Wang, Xinwei
 7 <120> TITLE OF INVENTION: ADAPTER-DIRECTED DISPLAY SYSTEMS
 9 <130> FILE REFERENCE: 13403.0005NPUS00
 11 <140> CURRENT APPLICATION NUMBER: US/10/033,399
 11 <141> CURRENT FILING DATE: 2001-11-02
 11 <160> NUMBER OF SEQ ID NOS: 24
 13 <170> SOFTWARE: PatentIn version 3.1
 15 <210> SEQ ID NO: 1
 16 <211> LENGTH: 57
 17 <212> TYPE: DNA
 18 <213> ORGANISM: Bacteriophage M13
 20 <400> SEQUENCE: 1
 21 gtgaaaaaat tattattcgc aattccttta gttgttcctt tctattctca ctccgct 57
 24 <210> SEQ ID NO: 2
 25 <211> LENGTH: 19
 26 <212> TYPE: PRT
 27 <213> ORGANISM: Bacteriophage M13
 29 <400> SEQUENCE: 2
 31 Val Lys Lys Leu Leu Phe Ala Ile Pro Leu Val Val Pro Phe Tyr Ser
 32 1 5 10 15
 35 His Ser Ala
 39 <210> SEQ ID NO: 3
 40 <211> LENGTH: 57
 41 <212> TYPE: DNA
 42 <213> ORGANISM: Bacteriophage M13
 44 <400> SEQUENCE: 3
 45 gtgaaaaaat tattattcgc aattccttta gtggtacctt tctattctca ctccgct 57
 48 <210> SEQ ID NO: 4
 49 <211> LENGTH: 222
 50 <212> TYPE: DNA
 51 <213> ORGANISM: Artificial Sequence
 53 <220> FEATURE:
 54 <223> OTHER INFORMATION: Synthetic, comprising phage gene III leader sequence, GABAB
 recep
 55 tor 2 domain and Myc domain
 57 <400> SEQUENCE: 4
 58 ttagtggtac ctttctattc tcaactccgct acatcccgcc tggagggcct acagtcagaa 60
 60 aaccatcgcc tgcgaatgaa gatcacagag ctggataaag acttggaaga ggtaaccatg 120
 62 cagctgcagg acgtcggagg ttgcgcggcc gcagaacaaa aactcatctc agaagaggat 180
 64 ctgagatctg gaggcggtac tgttgaaagt tgtttagcaa aa 222
 67 <210> SEQ ID NO: 5
 68 <211> LENGTH: 74

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/033,399

DATE: 01/18/2002

TIME: 08:04:15

Input Set : A:\13403.0005NPUS00.ST25.txt

Output Set: N:\CRF3\01182002\J033399.raw

69 <212> TYPE: PRT

70 <213> ORGANISM: Artificial Sequence

72 <220> FEATURE:

73 <223> OTHER INFORMATION: Synthetic, comprising phage gene III leader sequence, GABAB

recep

74 tor 2 domain and Myc domain

76 <400> SEQUENCE: 5

78 Leu Val Val Pro Phe Tyr Ser His Ser Ala Thr Ser Arg Leu Glu Gly

79 1 5 10 15

82 Leu Gln Ser Glu Asn His Arg Leu Arg Met Lys Ile Thr Glu Leu Asp

83 20 25 30

86 Lys Asp Leu Glu Glu Val Thr Met Gln Leu Gln Asp Val Gly Gly Cys

87 35 40 45

90 Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Arg Ser Gly

91 50 55 60

94 Gly Gly Thr Val Glu Ser Cys Leu Ala Lys

95 65 70

98 <210> SEQ ID NO: 6

99 <211> LENGTH: 56

100 <212> TYPE: PRT

101 <213> ORGANISM: Artificial Sequence

103 <220> FEATURE:

104 <223> OTHER INFORMATION: Synthetic, comprising phage gene III leader sequence, GABAB

recep

105 tor 2 domain and Myc domain

107 <400> SEQUENCE: 6

109 Thr Ser Arg Leu Glu Gly Leu Gln Ser Glu Asn His Arg Leu Arg Met

110 1 5 10 15

113 Lys Ile Thr Glu Leu Asp Lys Asp Leu Glu Glu Val Thr Met Gln Leu

114 20 25 30

117 Gln Asp Val Gly Gly Cys Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu

118 35 40 45

121 Glu Asp Leu Arg Ser Gly Gly Gly

122 50 55

125 <210> SEQ ID NO: 7

126 <211> LENGTH: 3093

127 <212> TYPE: DNA

128 <213> ORGANISM: Artificial Sequence

130 <220> FEATURE:

131 <223> OTHER INFORMATION: Synthetic, comprising ampicillin gene sequence, ColE1

replication

132 origin, fl replication origin, Plac promoter, GABAB receptor 1 d

133 omain, histidine tag

135 <400> SEQUENCE: 7

136 gcgcaacgca attaatgtga gtagctcac tcattaggca cccagggctt tacactttat 60

138 gcttcggct cgtatgtgt gtggaattgt gagcggataa caatttaccg gttctttaag 120

140 gaggaattaa aaaatgaaat acctattgcc tacggcagcc gctggattgt tattactcgc 180

142 ggcccagccg gccatggcgg ccctgcaggc ctctagagcg gccgctggag gtgaggagaa 240

144 gtcccggctg ttggagaagg agaaccgtga actggaaaag atcattgctg agaaagagga 300

146 gcgtgtctct gaactgcgcc atcaactcca gtctgtagga ggtttagat cttatccata 360

148 cgacgtacca gactacgcag gaggtcatca ccatcatcac cattaatgag tcgacctcga 420

150 ccaattcgcc ctatagttag tcgtattaca attcactggc cgtogtttta caacgtcgtg 480

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/033,399

DATE: 01/18/2002

TIME: 08:04:15

Input Set : A:\13403.0005NPUS00.ST25.txt

Output Set: N:\CRF3\01182002\J033399.raw

```

152 actgggaaaa ccctggcggtt acccaactta atcgcccttgc agcacatccc cctttcgcca 540
154 gctggcgtaa tagcgaagag gccgcgaccg atcgcccttc ccaacagttg cgcagcctga 600
156 atggcgaaatg ggacgcgccc tgtagcgggc cattaagcgc ggcgggtgtg gtggttacgc 660
158 gcagcgtgac cgctacactt gccagcgccc tagcgccgcg tcctttcgct ttcttccctt 720
160 cctttctcgc caggttcgcc ggctttcccc gtcaagctct aaatcggggg ctccctttag 780
162 ggttccgatt tagtgcttta cggcacctcg accccaaaaa acttgattag ggtgatgggt 840
164 cacgtagtg gcatcgccc tgatagacgg tttttcgccc tttgacgttg gaggccacgt 900
166 tctttaatag tggactcttg ttccaaactg gaacaacact caaccctatc tcggtctatt 960
168 cttttgattt ataagggatt ttgccgattt cggcctattg gttaaaaaat gagctgattt 1020
170 aacaaaaatt taacgcgaat ttttaacaaa tattaacgct tacaatttag gtggcacttt 1080
172 tcggggaaat gtgcgcggaa cccctatttg tttatttttc taaatacatt caaatatgta 1140
174 tccgctcatg agacaataac cctgataaat gcttcaataa tattgaaaaa ggaagagtat 1200
176 gagtattcaa catttccgtg tcgcccttat tccctttttt gcggcatttt gccttcctgt 1260
178 ttttctcac ccagaaacgc tggtgaaagt aaaagatgct gaagatcagt tgggtgcacg 1320
180 agtgggttac atcgaaactgg atctcaacag cggtaagatc cttgagagtt ttgcgcccga 1380
182 agaacgtttt ccaatgatga gcactttttaa agttctgcta tgtggcgcgg tattatcccg 1440
184 tattgacgcc gggcaagagc aactcggtcg ccgcatacac tattctcaga atgacttggt 1500
186 tgagtactca ccagtcacag aaaagcatct tacggatggc atgacagtaa gagaattatg 1560
188 cagtgtgcc ataaccatga gtgataacac tgcggccaac ttacttctga caacgatcg 1620
190 aggaccgaag gagctaaccg cttttttgca caacatgggg gatcatgtaa ctgccttga 1680
192 tcgttgggaa ccggagctga atgaagccat accaaacgac gagcgtgaca ccacgatgcc 1740
194 tgtagcaatg gcaacaacgt tgcgcaaact attaaactggc gaactactta ctctagcttc 1800
196 ccggcaacaa ttaatagact ggatggaggc ggataaagtt gcaggaccac ttctgcgctc 1860
198 ggccttccg gctggctggt ttattgctga taaatctgga gccggtgagc gtgggtctcg 1920
200 cggatcatt gcagcactgg ggcagatgg taagccctcc cgtatcgtag ttatctacac 1980
202 gacggggagt caggcaacta tggatgaacg aaatagacag atcgctgaga taggtgcctc 2040
204 actgattaag cattgtaac tgtcagacca agtttactca tatatacttt agattgattt 2100
206 aaaacttcat ttttaattta aaaggatcta ggtgaagatc ctttttgata atctcatgac 2160
208 caaaatccct taacgtgagt tttcgttcca ctgagcgtca gaccccgtag aaaagatcaa 2220
210 aggatcttct tgagatcctt tttttctgcg cgtaatctgc tgcttgcaaa caaaaaaac 2280
212 accgctacca gcggtggttt gtttgccgga tcaagagcta ccaactcttt ttccgaaggt 2340
214 aactggcttc agcagagcgc agataccaaa tactgtcctt ctagtgtagc cgtagttagg 2400
216 ccaccacttc aagaactctg tagcaccgcc tacatacctc gctctgctaa tcctgttacc 2460
218 agtggctgct gccagtggcg ataagtctg tcttaccggg ttggactcaa gacgatagtt 2520
220 accggataag gcgcagcggc cgggctgaac ggggggttcg tgcacacagc ccagcttggg 2580
222 gcgaacgacc tacaccgaac tgagatacct acagcgtgag ctatgagaaa gcgccacgct 2640
224 tcccgaagg agaaaggcgg acaggtatcc ggtaagcggc agggtcggaa caggagagcg 2700
226 cagcagggag cttccagggg gaaacgcctg gtatctttat agtcctgtcg ggtttcgcca 2760
228 cctctgactt gagcgtgat ttttgtgat ctcgtcaggg ggcggagcc tatggaaaaa 2820
230 cgccagcaac gcggcctttt tacggttctt ggccttttgc tggccttttg ctacatggt 2880
232 ctttctcgc ttatccctg attctgtgga taaccgtatt accgccttg agtgagctga 2940
234 taccgctcgc cgcagccgaa cgaccgagc cagcagatca gtgagcgagg aagcgggaaga 3000
236 gcgccaata cgcaaacgc ctctccccgc gcgttggccg attcattaat gcagctggca 3060
238 cgacaggttt cccgactgga aagcgggcag tga 3093
241 <210> SEQ ID NO: 8
242 <211> LENGTH: 192
243 <212> TYPE: DNA
244 <213> ORGANISM: Bacteriophage M13
246 <400> SEQUENCE: 8

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/033,399

DATE: 01/18/2002

TIME: 08:04:15

Input Set : A:\13403.0005NPUS00.ST25.txt

Output Set: N:\CRF3\01182002\J033399.raw

247 ttagtggtac ctttctattc tcaactccgct taggcttgcg gtggtgcggc cgcagaacaa 60
 249 aaactcatct cagaagagga tctgagatct agatctggag gcggtactgt tgaaagtgt 120
 251 ttagcaaaac ctcatacaga aaattcattt actaacgtct ggaaagacga caaaacttta 180
 253 gatcggttacg ct 192

256 <210> SEQ ID NO: 9

257 <211> LENGTH: 64

258 <212> TYPE: PRT

259 <213> ORGANISM: Bacteriophage M13

261 <220> FEATURE:

262 <221> NAME/KEY: MISC_FEATURE

263 <222> LOCATION: (11)..(11)

264 <223> OTHER INFORMATION: Xaa = stop codon

267 <400> SEQUENCE: 9

W--> 269 Leu Val Val Pro Phe Tyr Ser His Ser Ala Xaa Ala Cys Gly Gly Ala
 270 1 5 10 15
 273 Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Arg Ser Arg Ser
 274 20 25 30
 277 Gly Gly Gly Thr Val Glu Ser Cys Leu Ala Lys Pro His Thr Glu Asn
 278 35 40 45
 281 Ser Phe Thr Asn Val Trp Lys Asp Asp Lys Thr Leu Asp Arg Tyr Ala
 282 50 55 60

*Xaa can only represent a single
 amino acid;
 it cannot
 represent a
 stop codon*

285 <210> SEQ ID NO: 10

286 <211> LENGTH: 2962

287 <212> TYPE: DNA

288 <213> ORGANISM: Artificial Sequence

290 <220> FEATURE:

291 <223> OTHER INFORMATION: Synthetic, comprising ampicillin gene sequence, ColE1
 replication

292 origin, fl replication origin, Plac promoter, influenza virus he
 293 magglutinin tag

295 <400> SEQUENCE: 10

296 gcgcaacgca attaatgtga gttagctcac tcattaggca ccccaggctt tacactttat 60
 298 gcttcgggct cgtatgttgt gtggaattgt gagcggataa caatttaccg gttcttttaa 120
 300 ctttagtaag gaggaattaa aaaatgaaat acctattgcc tacggcagcc gctggattgt 180
 302 tattactcgc ggcccagccg gccatggcgg ccctgcaggc ctctagagcg gccgcttacc 240
 304 cgtacgacgt tccggactac gcagggtggct gctgataagt cgacctcgac caattcgccc 300
 306 tatagtgaat cgtattacaa ttaactggcc gtgcgttttac aacgtcgtga ctgggaaaac 360
 308 cctggcggtta cccaacttaa tgccttgca gcacatcccc ctttcgccag ctggcgtaat 420
 310 agcgaagagg cccgcaccga tgcctctcc caacagttgc gcagcctgaa tggcggaatgg 480
 312 gacgcgccct gtacggcgcg attaagcgcg gcgggtgtgg tggttacgcg cagcgtgacc 540
 314 gctacacttg ccagcgccct agcggccgct ccttccgctt tcttcccttc ctttctcgcc 600
 316 acgttcgccc gctttccccc tcaagctcta aatcgggggc tccctttagg gttccgattt 660
 318 agtgctttac ggcacctcga ccccaaaaaa cttgattagg gtgatggttc acgtagtggg 720
 320 ccacgcacct gatagacggt ttttcgccct ttgacgttgg agtccacgtt ctttaatagt 780
 322 ggactcttgt tccaaactgg aacaacactc aacctatct cggctctatc ttttgattta 840
 324 taaggggattt tgccgatttc ggcctattgg ttaaaaaatg agctgattta acaaaaaattt 900
 326 aacgcgaatt ttaacaaaat attaacgctt acaatttagg tggcactttt cggggaaatg 960
 328 tgcgcggaac ccctatttgt ttatttttct aaatacatc aaatatgtat ccgctcatga 1020
 330 gacaataacc ctgataaatg cttcaataat attgaaaaag gaagagtatg agtattcaac 1080
 332 atttccgtgt cgcccttatt cccttttttg cggcattttg ccttcctgtt tttgctcacc 1140

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/033,399

DATE: 01/18/2002

TIME: 08:04:15

Input Set : A:\13403.0005NPUS00.ST25.txt

Output Set: N:\CRF3\01182002\J033399.raw

```

334 cagaaacgct ggtgaaagta aaagatgctg aagatcagtt ggggtgcacga gtgggtttaca 1200
336 tcgaactgga tctcaacagc gtaagatcc ttgagagttt tcgccccgaa gaacgttttc 1260
338 caatgatgag cactttttaa gttctgctat gtggcgcggt attatcccggt attgacgccg 1320
340 ggcaagagca actcggctgc cgcatacact attctcagaa tgacttggtt gactactcac 1380
342 cagtcacaga aaagcatctt acggatggca tgacagtaag agaattatgc agtgctgcca 1440
344 taaccatgag tgataacact gcggccaact taacttctgac aacgatcgga ggaccgaagg 1500
346 agctaaccgc ttttttgac aacatggggg atcatgtaac tcgecttgat cgttgggaac 1560
348 cggagctgaa tgaagccata ccaaacgacg agcgtgacac cacgatgcct gtagcaatgg 1620
350 caacaacgtt gcgcaaaacta ttaactggcg aactacttac tctagcttcc cggcaacaat 1680
352 taatagactg gatggaggcg gataaagttg caggaccact tctgcgctcg gcccttcg 1740
354 ctggctggtt tattgtctat aaatctggag ccggtgagcg tgggtctcgc ggtatcattg 1800
356 cagcactggg gccagatggt aagccctccc gtatcgtagt tatctacacg acggggagtc 1860
358 aggcaactat ggatgaacga aatagacaga tcgctgagat aggtgcctca ctgattaagc 1920
360 attggtaact gtcagaccaa gtttactcat atatacttta gattgattta aaacttcatt 1980
362 ttttaatttaa aaggatctag gtgaagatcc tttttgataa tctcatgacc aaaatccctt 2040
364 aacgtgagtt ttggttccac tgagcgtcag acccgtaga aaagatcaaa ggatcttctt 2100
366 gagatccttt ttttctgcgc gtaatctgct gcttgcaaac aaaaaaacca ccgctaccag 2160
368 cgggtggtttg tttgcccgat caagagctac caactctttt tccgaaggta actggcttca 2220
370 gcagagcgca gataccaaat actgtccttc tagtgtagcc gtagttaggc caccacttca 2280
372 agaactctgt agcaccgcct acatacctcg ctctgcta atctgttacc gtggctgctg 2340
374 ccagtggcga taagtcgtgt cttaccgggt tggactcaag acgatagtta ccggataagg 2400
376 cgcagcggtc gggctgaacg gggggttcgt gcacacagcc cagcttgag cgaacgacct 2460
378 acaccgaact gagataccta cagcgtgagc tatgagaaag cgccacgctt cccgaaggga 2520
380 gaaaggcgga caggtatccg gtaagcggca gggctcggaac aggagagcgc acgagggagc 2580
382 ttccaggggg aaacgcctgg tatctttata gtctgtcgg gtttcgccac ctctgacttg 2640
384 agcgtcgatt tttgtgatgc tcgtcagggg ggcggagcct atggaaaaac gccagcaacg 2700
386 cggccttttt acggttctcg gccttttctg ggccttttgc tcacatgttc tttctgctg 2760
388 tatcccttga tttctgtgat aaccgtatta ccgcctttga gtgagctgat accgctcgcc 2820
390 gcagccgaac gaccgagcgc agcagtcag tgagcgagga agcggaaagag cgcccaatac 2880
392 gcaaaccgcc tctccccgcg cgttggcga ttcattaatg cagctggcac gacaggtttc 2940
394 ccgactggaa agcgggcagt ga
397 <210> SEQ ID NO: 11 2962
398 <211> LENGTH: 903
399 <212> TYPE: DNA
400 <213> ORGANISM: Bacteriophage M13
402 <400> SEQUENCE: 11
403 ttagtggtac ctttctatc tcaactcgc acatcccgc tggagggct acagtcagaa 60
405 aaccatcgcc tgcaatgaa gatcacagag ctggataaag acttgaaga ggtcaccatg 120
407 cagctgcagg acgtcggagg ttgcgcggcc gcagaacaaa aactgatctc agaagaggat 180
409 ctgacgcgtg ctggcggcgg ctctggtggt ggttctggtg gcggtctga ggggtggcggc 240
411 tctgaggggt gcggttctga ggggtggcggc tctgaggggt gcggttccg tggcggctcc 300
413 ggttccgggt attttgatta tgaaaaaatg gcaaacgcta ataagggggc tatgaccgaa 360
415 aatgccgatg aaaacgcgct acagtctgac gctaaaggca aacttgattc tgcgctact 420
417 gattacgggt ctgctatcga tgggttctcatt ggtgaagttt ccggccttgc taatggtaat 480
419 ggtgctactg gtgattttgc tggctctaat tcccaaatgg ctcaagtcgg tgacggtgat 540
421 aattcacctt taatgaataa tttccgtcaa tatttacctt cctccctca atcggttgaa 600
423 tgctgccctt ttgtctttgg cgtcggtaaa ccatatgaat tttctattga ttgtgacaaa 660
425 ataaacttat tccgtggtgt ctttgcggtt cttttatatg ttgccacct tatgtatgta 720
427 ttttctacgt ttgctaacat actgcgtaat aaggagtctt aataaggcgc gccacaattt 780

```

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to ensure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

MSI →

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/033,399

DATE: 01/18/2002

TIME: 08:04:16

Input Set : A:\13403.0005NPUS00.ST25.txt

Output Set: N:\CRF3\01182002\J033399.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 .